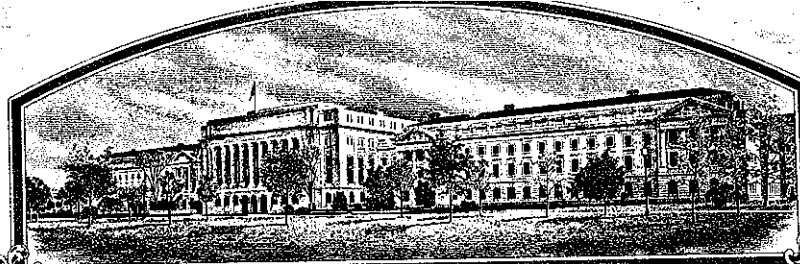


No.

7800042



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

D. J. van der Have B. V.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS OF THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BARLEY

'Menuet'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 12th day of April in
the year of our Lord one thousand nine
hundred and seventy-nine

Attest:

Emanuel A. Lueder
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

D. J. van der Have
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY VDH 331-69		1b. VARIETY NAME Menuet		FOR OFFICIAL USE ONLY PV NUMBER 7800042	
2. KIND NAME spring barley		3. GENUS AND SPECIES NAME Hordeum vulgare		FILING DATE 3-20-78	TIME 4:00 P.M.
4. FAMILY NAME (BOTANICAL) Gramineae		5. DATE OF DETERMINATION August 1974		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 3-20-78 3-19-79
6. NAME OF APPLICANT(S) Koninklijk Kweekbedrijf en Zaadhandel D.J. van der Have B.V.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box 1, 4420 AA Kapelle, Netherlands.		8. TELEPHONE AREA CODE AND NUMBER	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Netherlands		11. DATE OF INCORPORATION 8th March 1973	
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Koninklijk Kweekbedrijf en Zaadhandel D.J. van der Have B.V., P.O. Box 1, 4410 AA Rilland, Netherlands.					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ YES ☐ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? 2x 10/24/78
☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☒ YES ☐ NO (If "Yes," give name of countries and dates.)

Netherlands: January 1975 Ireland : February 1977
Belgium : December 1974 Spain : July 1977
France : January 1975
New Zealand: June 1977

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☒ YES ☐ NO (If "Yes," give name of countries and dates.)

Netherlands: July 1977
Belgium : January 1978
France : January 1977

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

Rilland, March 8th 1978

(DATE)

(SIGNATURE OF APPLICANT)
K.B. Geling

86/1048

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

Origin and Breeding History of the spring barley variety Menuet.

The variety was selected from the cross

L 92 x Minerva x Emir a Zephyr

The final cross was made in 1963 in the Netherlands.

From F1 to F6, the progenies of the cross were selected according to the pedigree-system, without yield trials. In 1969, the variety was selected out of several ear-row progenies sown on small plots on the Van der Have plant breeding station in Rilland under the experimental designation VDH 331-69.

The first yield trials were carried out in the Netherlands in 1970. From 1971 till 1975, replicated yield trials were carried out in the Netherlands and several European and overseas countries.

The purification and maintenance of the variety started in 1972 by the sowing of 30 plant progenies. Based on these plant progenies, the purification and maintenance was continued by sowing each year a number of plant progenies and plant row progenies, which were closely examined for uniformity and stability for field characteristics as well as morphological characteristics.

After harvest 1974, the results of four years of yield trials justified application for plant variety rights in several countries, as stated under item 13A. At the same time, the production of foundation seed was started, out of seed lots, obtained from the maintenance program.

In the maintenance program, as well as during the application procedures in several countries, no evidence was found of lack of uniformity or stability of the variety.

As evidence of uniformity or stability of the variety a copy is enclosed of the grant for plant variety rights, made up by the Dutch Board for Plant Variety Rights on 4-7-1977.

Exhibit 13B.Statement of novelty of the spring barley variety Menuet.

Descriptive characters:

Type : two rowed spring barley

Culm : short

Leaf : during stem elongation fairly slender, semi erect, rather dark green with anthocyanin coloration in leaf sheaths and auricles.

Ear : rather long, fairly slender, awned, with rather weak anthocyanin coloration in the tips of the awns; ear attitude after emergence erect, during ripening recurved. Rather long rachis segments.

Grain: short haired rachilla, without hairs along the ventral furrow, with weakly spiculated inner lateral nerves of the lemma and with anthocyanin coloration in the nerves during ripening.

The variety is rather early in ear emergence, compared to most European spring barley varieties.

As was stated by the RIVRO, the official Dutch institute of variety testing, the novelty of the variety in comparison to all other spring barley varieties can be proved by this description.

The variety which, to our knowledge, most closely resembles the variety Menuet, is the spring barley variety Zephyr. Regarding morphological characters, Menuet can be distinguished from Zephyr by the spiculation of the inner lateral nerves of the lemma: Zephyr: not spiculated

Menuet: spiculated

Addendum to Exhibit 13A.

concerning origin and breeding history of the spring barley variety Menuet, application nr. 7800042.

During the reproduction and multiplication of the variety Menuet in 1977 and 1978, variants were observed:

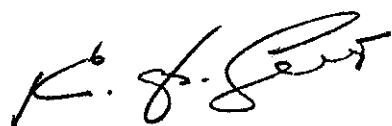
These variants could only be clearly identified by the rachilla hairs:

Menuet has short rachilla hairs, the observed variants had long rachilla hairs. The frequency of these variants in breeders' seed productions and foundation seed productions varied from 0.05% up to 0.3%. These variants were most probably caused by natural hybridization.

As precautions have been taken against the occurrence of natural hybridization in the maintenance program of Menuet and the occurrence of variants will be continuously checked, we expect that the variants will be eliminated.

Rilland, 23-1-1979.

K.B. Geling

A handwritten signature in black ink, appearing to read 'K. B. Geling', with a stylized, cursive script.

OBJECTIVE DESCRIPTION OF VARIETY
BARLEY (HORDEUM VULGARE)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Koninklijk Kweekbedrijf en Zaadhandel

D.J. van der Have B.V.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)
P.O. Box 1,

4420 AA Kapelle, Netherlands

FOR OFFICIAL USE ONLY

PVPO NUMBER 7800042

VARIETY NAME OR TEMPORARY DESIGNATION Menuet

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (i.e. 0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. GROWTH HABIT:

1 = SPRING 2 = FACULTATIVE WINTER 3 = WINTER 2 Early Growth: 1 = PROSTRATE 2 = SEMIPROSTRATE 3 = ERECT

2. MATURITY (50% Flowering):

1 = EARLY (California Mariout) 2 = MIDSEASON (Betzes) 3 = LATE (Frontier)

No. of days Earlier than 1 = BETZES 2 = CALIFORNIA MARIOUT 3 = CONQUEST 4 = DICKSON
No. of days Later than 5 = PIROLINE 6 = PRIMUS 7 = UNITAN

3. PLANT HEIGHT (From soil level to top of head):

1 = SEMIDWARF 2 = SHORT (California Mariout) 3 = MEDIUM TALL (Betzes) 4 = TALL (Conquest)

Cm. Shorter than 1 = BETZES 2 = CALIFORNIA MARIOUT 3 = CONQUEST 4 = DICKSON
Cm. Taller than 5 = PIROLINE 6 = PRIMUS 7 = UNITAN

4. STEM:

Exertion (Flag to spike at maturity): 1 = 0 - 3 cm. 2 = 3 - 10 cm. 3 = 10 - 15 cm. Anthocyanin: 1 = ABSENT 2 = PRESENT

NO. OF NODES (Originating from node above ground)

Collar Shape: 1 = CLOSED 2 = V-SHAPED 3 = OPEN 4 = MODIFIED CLOSED OR OPEN Shape of Neck: 1 = STRAIGHT 2 = SNAKY 3 = OTHER (Specify)

5. LEAF:

Basal leaf sheath (seedling): 1 = GLABROUS 2 = PUBESCENT Position of flag leaf (at boot stage): 1 = DROOPING 2 = UPRIGHT

Waxiness: 1 = ABSENT (Glossy) 2 = SLIGHTLY WAXY 3 = WAXY

CM. LENGTH (First leaf below flag leaf)

Anthocyanin in leaf sheath: 1 = ABSENT 2 = PRESENT

6. HEAD:

Type: 1 = TWO-ROWED 2 = SIX-ROWED

Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (Specify) parallel

Lateral Kernels Overlap: 1 = NONE 2 = AT TIP 3 = 1/4 - 1/2 OF HEAD

Density: 1 = LAX 2 = ERECT (Not dense) 3 = ERECT (Dense)

Waxiness: 1 = ABSENT (Glossy) 2 = SLIGHTLY WAXY 3 = WAXY

Rachis (Hair on edge): 1 = LACKING 2 = FEW 3 = COVERED

7. GLUME:

Length: 1 = 1/3 OF LEMMA 2 = 1/2 OF LEMMA 3 = MORE THAN 1/2 OF LEMMA

Hair covering: 1 = NONE 2 = RESTRICTED TO MIDDLE 3 = CONFINED TO BAND 4 = COMPLETELY COVERED

Awns: 1 = LESS THAN EQUAL TO LENGTH OF GLUMES 2 = EQUAL TO LENGTH OF GLUMES 3 = MORE THAN EQUAL TO LENGTH OF GLUMES

Awn Surface: 1 = SMOOTH 2 = SEMISMOOTH 3 = ROUGH

8. LEMMA:

☐ 5 Awn: 1 = AWNLESS 2 = AWNLETS ON CENTRAL ROWS, AWNLESS ON LATERAL ROWS
 3 = SHORT ON CENTRAL ROWS, AWNLETS ON LATERAL ROWS 4 = SHORT (less than equal to length of spike)
 5 = LONG (longer than spike) 6 = HOODED

☐ 3 Awn Surface: 0 = AWNLESS 1 = SMOOTH 2 = SEMISMOOTH 3 = ROUGH

☐ 2 Teeth: 1 = ABSENT 2 = FEW 3 = NUMEROUS ☐ 2 Hair: 1 = ABSENT 2 = PRESENT

☐ 1 Shape of base: 1 = DEPRESSION 2 = SLIGHT CREASE 3 = TRANSVERSE CREASE ☐ 1 Rachilla Hairs: 1 = SHORT 2 = LONG

9. STIGMA:

☐ 2 Hairs: 1 = FEW 2 = MANY

10. SEED:

☐ 2 Type: 1 = NAKED 2 = COVERED ☐ 1 Hairs on Ventral Furrow: 1 = ABSENT 2 = PRESENT

☐ 3 Length: 1 = SHORT (8.0 mm.) 2 = SHORT TO MIDLONG (7.5 - 9.0 mm.) 3 = MIDLONG (8.5 - 9.5 mm.)
 4 = MIDLONG TO LONG (9.0 - 10.5 mm.) 5 = LONG (10.0 mm.)

☐ 2 Wrinkling of hull: 1 = NAKED 2 = SLIGHTLY WRINKLED 3 = SEMIWRINKLED 4 = WRINKLED

☐ 1 Aleurone Color: 1 = COLORLESS (White or Yellow) 2 = BLUE

☐ - ☐ PERCENT ABORTIVE

☐ 4 ☐ 4 GMS. PER 1000 SEEDS

11. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> 0 SEPTORIA	<input type="checkbox"/> 0 NET BLOTCH	<input type="checkbox"/> 0 SPOT BLOTCH	<input type="checkbox"/> 2 POWDERY MILDEW
<input type="checkbox"/> 0 LOOSE SMUT	<input type="checkbox"/> 0 BACTERIAL BLIGHT	<input type="checkbox"/> 0 COVERED SMUT	<input type="checkbox"/> 0 FALSE LOOSE SMUT
<input type="checkbox"/> 0 STEM RUST	<input type="checkbox"/> 2 LEAF RUST	<input type="checkbox"/> 0 SCAB	<input type="checkbox"/> 0 SCALD
<input type="checkbox"/> 0 AY	<input type="checkbox"/> 0 BSMV	<input type="checkbox"/> 0 BYDV	<input type="checkbox"/> 2 OTHER (Specify) yellow rust

12. INSECT: (0 = Not tested, 1 = Susceptible 2 = Resistant)

<input type="checkbox"/> 0 GREEN BUG	<input type="checkbox"/> 0 ENGLISH GRAIN APHID	<input type="checkbox"/> 0 CHINCH BUG	<input type="checkbox"/> 0 ARMYWORM
<input type="checkbox"/> 0 GRASS HOPPERS	<input type="checkbox"/> 0 CERIAL LEAF BETTLE	<input type="checkbox"/> 0 OTHER (Specify)	
HESSIAN FLY RACES		<input type="checkbox"/> 0 GP	<input type="checkbox"/> 0 A
		<input type="checkbox"/> 0 B	<input type="checkbox"/> 0 C
		<input type="checkbox"/> 0 D	<input type="checkbox"/> 0 E
		<input type="checkbox"/> 0 F	<input type="checkbox"/> 0 G

13. CHEMICAL (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☐ 2 DDT ☐ - OTHER (Specify)

14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Zephyr	Seed size	-
Leaf size	Zephyr	Coleoptile elongation	-
Leaf color	Zephyr	Seedling pigmentation	-
Leaf carriage	Zephyr		

REFERENCES: The following publications may be used as a reference aid for the standardization of character descriptions and terms used in this form:

- Wiebe, G. A., and D. A. Reid, 1961, Classification of Barley Varieties Grown in the United States and Canada in 1958, Technical Bulletin No. 1224, U.S. Dept. of Agriculture.
- Reid, D. A., and G. A. Wiebe, 1968, Barley: Origin, Botany, Culture, Winter Hardiness, Genetics, Utilization, Pests, Agriculture Handbook No. 338, U.S. Dept. of Agriculture. pp. 61 - 84.
- Malting Barley Improvement Association, Milwaukee, Wisconsin, 1971, Barley Variety Dictionary.

COLOR: Nickerson's or any recognized color fan may be used to determine color of the described variety.


.2.

Regarding field characters, Menuet can be distinguished from Zephyr by:
higher yield
less susceptibility for powdery mildew
better straw stiffness

Exhibit 13D.Additional description of the spring barley variety Menuet.

According to the malting tests, carried out in the Netherlands and France, the spring barley variety Menuet has a good malting quality. Enclosed a summary is given of some malting characters of Menuet in comparison to the variety Zephyr, which was accepted as a good malting barley in several European countries, obtained in the Netherlands in the past three years.

Rilland, March 8th 1978


K.B. Geling

AFDELING : LANDBOUWGEWASSEN

Betreft : Toewijzing aanvraag tot verlening van kwekersrecht

Aanvraag nr. : L 3127

De Raad voor het Kwekersrecht, samengesteld als volgt :

ir. J.I.C. Butler, voorzitter
dr.ir. D.E. van der Zaag en ir. B. de Jong, leden
mr. A.W.A.M. van der Meeren, sekretaris

Gezien de op 20 januari 1975 te 24.00 uur door
Kon. Kweekbedrijf en Zaadhandel
D.J. van der Have B.V.
Kapelle 3615

bij de Raad krachtens artikel 35 van de Zaaizaad- en Plantgoedwet
ingediende aanvraag tot verlening van kwekersrecht

voor het ras : VDH 331-69 (Menuet)
van het gewas : gerst

Gezien het schriftelijk rapport van de vaste deskundige aan de Raad
uitgebracht ter voldoening aan de hem door de Raad in deze verstrekte
opdracht,

Gezien de overige stukken,

Overwegende, dat de Raad op grond van de bevindingen bij het onderzoek,
ingesteld door genoemde vaste deskundige, onder meer neergelegd in voor-
meld rapport, alsmede op grond van zijn eigen bevindingen van oordeel is,
dat het ras voldoet aan de eisen in artikel 29 van de Zaaizaad- en Plant-
goedwet voor verlening van kwekersrecht gesteld, terwijl ook overigens
niet van bezwaren tegen inwilliging van de aanvraag is gebleken, zodat
de aanvraag kan worden toegewezen,

B E S C H I K K E N D E

Besluit het hierna omschreven ras in het Nederlands Rassenregister in te
schrijven, met aantekening van verlening van kwekersrecht ten name van:

Kon. Kweekbedrijf en Zaadhandel
D.J. van der Have B.V.
Kapelle 3615

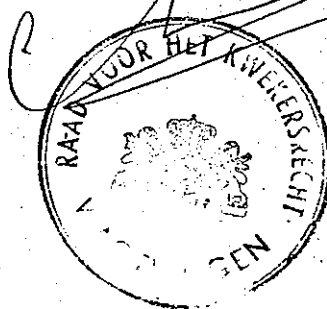
onder de bij beschikking van 27 november 1975 vastgestelde
benaming : Menuet

stelt vast de beschrijving van het ras, als op bijbehorend beschrijvings-
blad,

Aldus gewezen,

Wageningen, 4 JULI 1977

Voor eensluidend afschrift,
DE SECRETARIS,



voorzitter

(w.g.) J.I.C. Butler

sekretaris

(w.g.) A.W.A.M. van der Meeren

RILEY AND MALT ANALYSIS Mennet IN COMPARISON WITH ZEPHYR

RILEY ANALYSIS

	1975		1976		1977	
	Mennet	Zephyr	Mennet	Zephyr	Mennet	Zephyr
Free-malting in %	-	-	-	-	-	-
Protein content d.m.%	11.0	10.7	13.5	13.4	10.3	10.6
Grading > I 2.8 mm %	72.0	51.8	43.8	38.6	75.3	59.5
II 2.5-2.8 mm %	21.1	36.0	43.6	48.3	18.7	29.6
III 2.2-2.5 mm %	5.9	10.0	10.8	12.1	4.3	8.8
IV < 2.2 mm %	1.0	2.2	1.8	1.0	1.7	2.1
I+II %	93.1	87.8	87.4	86.9	94.0	89.1
Moisture %	5.1	6.2	6.0	10.1	2.9	4.9
100 corn weight d.m.gr.	40.5	38.9	38.7	38.5	40.5	38.7

LT ANALYSIS

Extract yield d.m. %	79.1	80.5	76.6	77.5	79.8	79.6
Extract difference d.m. EBC	0.8	1.6	2.1	2.0	3.2	2.3

Characterization time in min.

Clarity of wort	<10	<10	<10	<10	10	10
Cl	cl	cl	cl	cl	s.o.	s.o.
Titration	-	-	-	-	-	-
Color of the wort EBC	3.9	3.3	2.2	2.1	2.4	2.7
	5.8	5.9	5.9	5.9	5.9	5.9

Protein content d.m.%

N/L wort	10.4	10.0	12.8	13.1	9.8	10.2
	750	823	736	772	511	586
Bibach index	40	45	32	33	29	32

Optical attenuation %

	81.4	81.8	81.1	82.9	80.9	78.9
Viscosity in cp	1.53	1.54	1.68	1.60	1.62	1.62

78000042



United States
Department of
Agriculture

Agricultural
Research
Service

Northern Plains Area
National Seed
Storage Laboratory

1111 South Mason Street
Fort Collins, CO 80521-4500
Telephone: 970 495-3200
Fax: 970 221-1427

February 14, 1997

Marian R. Minnifield, Secretary
Plant Variety Protection Office
NAL Building, Room 500
10301 Baltimore Boulevard
Beltsville, Maryland 20705-2351

Subject: Expired PVPO's; disposition of

1. The following expired PVPO's have been transferred to the NPGS. Our records have been changed accordingly.

Serial Number		PVP Number
101862	01	PVP 7800029
102219	01	PVP 7800010
102675	01	PVP 7800088
102676	01	PVP 7400011
103506	01	PVP 7800084
103507	01	PVP 7900016
103508	01	PVP 7800082
103840	01	PVP 7900017
103842	01	PVP 7900067
104549	01	PVP 7700106
104551	01	PVP 7100046
314988	01	PVP 9500276
101863	01	PVP 7800026
102222	01	PVP 7800078
102226	01	PVP 7800091
101854	01	PVP 7200134
102214	01	PVP 7605014
102216	01	PVP 7900011
102217	01	PVP 7800095
102218	01	PVP 7800093
102220	01	PVP 7800097
102221	01	PVP 7800042

97 FEB 25 10 16

USDA



United States
Department of
Agriculture

Agricultural
Research
Service

Northern Plains Area
National Seed
Storage Laboratory

1111 South Mason Street
Fort Collins, CO 80521-4500
Telephone: 970 495-3200
Fax: 970 221-1427

102673	01	PVP 7800059
103502	01	PVP 7800096
103503	01	PVP 7800074
103509	01	PVP 7900044
103510	01	PVP 7900047
103838	01	PVP 7500042
103843	01	PVP 7300101
101859	01	PVP 7200132
102227	01	PVP 7700085
103511	02	PVP 7800028
103839	01	PVP 7900049
103845	01	PVP 7900048
104548	02	PVP 7800057
104550	01	PVP 7800024

97 FEB 25 10 16

USDA

Sincerely,